7.71: Reporting of Greenhouse Gas Emissions

- (1) <u>Purpose</u>. The purpose of 310 CMR 7.71 is to implement the reporting and verification requirement for statewide greenhouse gas emissions and to monitor and ensure compliance with the reporting provisions of M.G.L. c. 21N, the Climate Protection and Green Economy Act, St. 2008, c.-298, § 6.
- (2) <u>Definitions</u>. The definitions in 310 CMR 7.00: *Definitions* apply to 310 CMR 7.71. The following additional terms have the following meanings when they appear in 310 CMR 7.71. Where a term defined in 310 CMR 7.00: *Definitions* also appears in 310 CMR 7.71, the definition in 310 CMR 7.71 is applicable for the purpose of 310 CMR 7.71.

<u>Approved Verification Body</u> means a firm accredited by the American National Standards Institute to conduct greenhouse gas (GHG) inventory verification services for members of The Climate Registry.

<u>Biogenic Greenhouse Gas Emissions</u> means emissions of carbon dioxide that result from the combustion of biogenic (plant or animal) material, excluding fossil fuels.

<u>Carbon Dioxide Equivalent</u>- means the amount of carbon dioxide by weight that would produce the same amount of global warming impact as a given weight of another greenhouse gas, based on the best available science, including information from the Intergovernmental Panel on Climate Change. The global warming potentials included in the General Reporting Protocol CFR Part 98 shall be used to quantify and report greenhouse gas emissions in carbon dioxide equivalents pursuant to 310 CMR 7.71.

<u>CO₂-Budget Trading Program</u> means a multi-state <u>CO₂ air pollution control and emissions</u> reduction program established by regulation in several states, including Massachusetts pursuant to 310 CMR 7.70, for the purpose of reducing emissions of <u>CO₂</u> from electric generating units.

<u>Direct Emissions</u> means emissions from motor vehicles and emissions from stationary emission sources including, but not limited to, emissions from factory stacks, manufacturing processes and vents, fugitive emissions, and other process emissions.

<u>Direct Stack Emissions</u> means direct emissions, excluding emissions from motor vehicles.

Emission Point means any place at or from which any greenhouse gas is emitted to the ambient air.

<u>Emission Source</u> means any stationary emission source, or any motor vehicle, from which any greenhouse gas is emitted to the ambient air.

<u>Emitting Electricity Generators</u> means electricity generators that are powered by any fossil or biogenic fuels.

<u>Emitting Megawatt Hours</u> means megawatt hours that are generated by emitting electricity generators.

<u>Entity</u> means a person that owns or operates, in whole or in part, a source of greenhouse gas emissions from a generator of electricity or a commercial or industrial site including, but not limited to, a transportation fleet.

<u>Facility</u> means a building, structure or installation located on contiguous or adjacent properties of an entity, or a natural gas facility.

Greenhouse Gas means any chemical or physical substance that is emitted into the air and that the Department may reasonably anticipate will cause or contribute to climate change including, but not limited to, carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride, and any other gas for which 40 CFR Part 98 includes a method for calculating greenhouse gas emissions from any stationary emissions source.

<u>Motor Vehicle</u> means any equipment or mechanical device propelled primarily on land by power other than muscular power but does not mean railroad and railway engines and railway ears, vehicles operated by the system known as trolley motor or trackless trolley, or devices used for domestic purposes, such as lawnmowers or snowblowers.

Method means a way of calculating greenhouse gas emissions provided in 40 CFR Part 98 and any related monitoring, reporting, and recordkeeping requirements included in 40 CFR Part 98, but does not mean a reporting threshold, specific source category exemption, or any other type of requirement.

<u>Natural Gas Facility</u>- means a collection of interconnected natural gas containing equipment (*e.g.*, transmission and distribution pipelines, service lines, customer meters, compressors, tanks, metering stations, regulating stations, and any other interconnected equipment that contains natural gas) that is owned or operated by an entity.

Non-emitting Electricity Generators means electricity generators powered by hydro, nuclear, ocean, solar or wind power.

Non-emitting Megawatt Hours means megawatt hours that are generated by non-emitting electricity generators.

<u>Registry</u> means the regional greenhouse gas registry and reporting system designated by the Department to receive and publish greenhouse gas emissions data reported pursuant to 310 CMR 7.71(5) and (8).

<u>Retail Seller</u> means a competitive supplier licensed by the Department of Public Utilities or, as each is defined in M.G.L. c. 164A, § 1, an electric utility, municipal electric department or municipal light board.

Short Ton means 2000 pounds or 0.9072 metric tons.

Stationary Emission Source means any individual stationary piece of equipment or other stationary point from which any greenhouse gas is emitted to the ambient air, or any other stationary emission point. For the purpose of reporting greenhouse gas emissions pursuant to 310 CMR 7.71, all sources a source of greenhouse gas emissions located within the facility are considered stationary is a stationary emission source if 40 CFR Part 98 includes a method for calculating greenhouse gas emissions sources if they are designed that can be used to be stationary while in usequantify emissions from the source.

(3) Applicability.

- (a) Any entity owning, operating, or controlling a facility is subject to the requirements of 310 CMR 7.71(5) through (7and (6) if:
 - 1. said facility is required to report air emissions data to the Department pursuant to 310 CMR 7.00: *Appendix C* (The Air Operating Permit Program) and had stationary emission sources that emitted greenhouse gases during the previous calendar year;
 - 2. said facility has one or more stationary emission sources that collectively emitted greenhouse gases in excess of 5,000 short tons of greenhouse gases in carbon dioxide equivalents during the previous calendar year. In determining whether a facility has one or more stationary emission sources that collectively emit greenhouse gases in excess of 5,000 short tons, all direct stackgreenhouse gas emissions from all stationary emission sources and processes at the facility shall be included; or
 - 3. said facility was subject to the requirements of 310 CMR 7.71 (3)(a)1. or 2. in any past year.

(b) Exemption for Facilities with Low or Reduced Emissions.

- 1. Notwithstanding 310 CMR 7.71(3)(a)3., any entity may petition the Department to be exempted from the requirement to report greenhouse gas emissions from a facility provided -the following requirements are met. Said petition shall be submitted using a form provided by the Department.
 - a. The entity is not required to report greenhouse gas emissions from the facility pursuant to 310 CMR 7.71(3)(a)1. or 2.;
 - b. The entity is unlikely to be required to report greenhouse gas emissions from the facility pursuant to 310 CMR 7.71(3)(a)1. or 2. for any future year; and,

- c. At least one greenhouse gas emission report documenting greenhouse gas emissions from said facility of less than or equal to 5,000 short tons of greenhouse gases in carbon dioxide equivalents has been submitted pursuant to 310 CMR 7.71(5) and (6), verified pursuant to 310 CMR 7.71(7), and published in the registry.
- 2. The Department may approve a petition submitted pursuant to 310 CMR 7.71 (3)(b) only if the Department determines that all of the requirements set forth in 310 CMR 7.71(3)(b)1. have been met. In determining whether to approve or deny a petition pursuant to 310 CMR 7.71(3)(b), the Department may consider any information contained in said petition, and any other relevant information.
- 3. If the Department has approved a petition in accordance with 310 CMR 7.71(3)(b)2., the annual reporting requirement in 310 CMR 7.71(3)(a)3. shall not apply to said facility until such time as the reporting of greenhouse gas emissions from said facility is again required pursuant to 310 CMR 7.71(3)(a)1. or 2.
- (c) In determining whether an entity is subject to the requirements of 310 CMR 7.71 for calendar year 2009, only a facility's carbon dioxide emissions shall be considered in assessing whether the threshold in 310 CMR 7.71(3)(a)2. has been exceeded.
- (d) All retail sellers of electricity are subject to the requirements of 310 CMR 7.71(9).
- (4) Registration of 2008 Emissions. By April 15, 2009, any entity owning, operating or controlling a facility that:
 - (a) combusted any combination of solid, liquid, and gaseous fossil fuels that resulted in direct stack emissions of more than 5,000 short tons of carbon dioxide emissions during 2008; or
 - (b) reported air emissions pursuant to 310 CMR 7.00: Appendix C and combusted any quantity of any fossil fuel that resulted in direct stack emissions of carbon dioxide during 2008, shall register with the Department using a form provided by the Department.
- (5) <u>Annual Reporting by Facilities that Emit Greenhouse Gases.</u>
 - (a) Deadlines and General Reporting Requirements.
 - 1. <u>Facilities</u> Any entity owning, operating or controlling a facility that <u>are Required</u> is required to <u>Report Air Emissions Data Pursuant</u> report greenhouse gas emissions to the Department pursuant to 310 CMR 7. <u>OO: Appendix C.</u>71
 - a. By, and is not subject to Source Registration at 310 CMR 7.12, shall annually report, certify, and verify greenhouse gas emissions from stationary emission sources for the previous calendar year in accordance with 310 CMR 7.71(5) and (6) by April 15, 2010, and April 15th of each year thereafter, any.
 - (b) Any entity owning, operating or controlling a facility that is required to report air emissions data to the Department pursuant to 310 CMR 7.00: Appendix C and had stationary emission sources that collectively emitted greenhouse gases in excess of 5,000 short tons of greenhouse gases in carbon dioxide equivalents during the previous calendar year, or was previously required to report direct emissions pursuant to 310 CMR 7.71(5)(a)1.a., shall report and certify direct emissions of greenhouse gases for the previous calendar year in accordance with 310 CMR 7.71(5) and (6).
 - b. By April 15, 2010, and April 15th of each year thereafter, any entity owning, operating or controlling a facility that is required to report air emissions data gas emissions to the Department pursuant to 310 CMR 7.00: *Appendix C* and had 71 and is subject to Source Registration at 310 CMR 7.12 shall annually report, certify and verify greenhouse gas emissions from stationary emission sources that collectively emitted an amount of greenhouse gases that is less than or equal to 5,000 short tons of greenhouse gases in carbon dioxide equivalents during the previous calendar year, and did not previously report direct emissions pursuant to 310 CMR 7.71(5)(a)1.a. or 2., shall report and certify direct stack emissions of greenhouse gases for the previous calendar year in accordance with 310 CMR 7.71(5) and (6)- and the following schedule:
 - 2. Facilities that are not Required to Report Air Emissions Data Pursuant to 310 CMR-7.00: Appendix C.
 - 1. By April 15, 2010, and April 15th of each year thereafter, any entity owning, operating, or controlling a facility that 1, if the facility is not required to report air emissions data to submit Source Registration every three years in accordance with 310 CMR 7.12(2)(b).
 - 2. By May 1 for a facility subject to 310 CMR 7.00: Appendix C.
 - 3. By June 1 for a facility that:

- a. Has an RES permit issued by the Department pursuant to 310 CMR 7.00: Appendix C and had stationary emission sources that collectively emitted greenhouse gases in excess of 02(9);
- b. Had actual emissions of lead equal to or greater than 0.5,000 short tons of greenhouse gases in carbon dioxide equivalents during in the previous calendar year, or was previously required to report direct actual emissions pursuant to 310 CMR 7.71(5)(a)2. for any past year, shall report and certify direct emissions of greenhouse gases for of NO_x or VOC equal to or greater than 25 tons per year in the previous calendar year in accordance with 310 CMR 7.71(5) through (7).;
- (b) <u>Motor Vehicle Emissions</u>. Any entity required to report direct emissions from a facility pursuant to 310 CMR 7.71(5)(a)1.a. or 2. shall report emissions from motor vehicles that the entity or its affiliate owns or leases, and that were assigned to that facility. Motor vehicles are considered to be assigned to a facility if they operate in support of that facility more often than they operate in support of any other facility.
 - c. Emits an air contaminant subject to a NESHAP or is subject to a MACT standard defined at 40 CFR Part 61 and Part 63, for which the Department has received delegation from EPA; and/or
 - d. Is required, as a condition of a plan approval issued by the Department since January 1, 1990 to submit a Source Registration annually in accordance with 310 CMR 7.12.
- (c) Greenhouse gas emissions from stationary emission sources shall be reported in accordance with all applicable requirements of the General Reporting Protocol, and in accordance with the following:
 - 1. Data Quality Tiers (Reserved).
 - 2. Greenhouse gas emissions from each stationary emissions source at a facility shall be reported separately to the extent practicable. If emissions from one or more stationary emissions sources at a facility are not reported separately, the reporting entity shall document the rationale and justification for not reporting emissions from each stationary emissions source separately. These records shall be retained at the facility for five years and provided to the Department on request.
 - 3. Simplified estimation methods, as described in chapter 11 of the General Reporting Protocol, may be used to estimate emissions from any source or group of emissions sources at a facility, provided that the combined total emissions from such sources do not exceed 1000 short tons of greenhouse gases in carbon dioxide equivalents.
 - 4. In cases where the General Reporting Protocol does not include a specific methodology that can be used to quantify emissions from a particular emission source or process, emissions shall be quantified, to the extent practicable given equipment and procedures in place at the facility, in accordance with existing industry best practice or internationally accepted best practices, including industry or sector-specific methodologies published by The Climate Registry. Records that document the methodology and data used to quantify emissions in accordance with existing industry best practice methods or internationally accepted best practices shall be retained at the facility for five years and provided to the Department on request.
 - 5. In cases where an emissions factor is used to calculate emissions from material throughput (*e.g.*, fuel consumption), the quantity of the material, and any characteristics of the material that are needed to determine the correct emission factor, shall be reported.
- 6. In cases where emissions from a particular emission source are being reported to the United States Environmental Protection Agency pursuant to specified in 40 CFR Part 98, the same methodology shall be utilized to quantify the emissions from that source for the purpose of reporting the emissions pursuant to 310 CMR 7.71.
- (d) A facility specific report submitted in accordance with 310 CMR 7.71 shall be considered to constitute a complete report, regardless of how the General Reporting Protocol defines or uses the word "entity" to specify organizational boundaries.
- (e(d) Greenhouse gas emissions shall be reported electronically to the Department in a format that can be accommodated specified by the registry Department.
- (fe) If required by the registry or the Department, the reporting entity shall report emissions in metric tons. One metric ton equals 1.102 short tons.
- (g) Notwithstanding any other provisions of 310 CMR 7.71, only emissions of carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulfur hexafluoride are required to be reported.
- (h) Notwithstanding any other provisions of 310 CMR 7.71, for emissions that occur

- during calendar year 2009, only emissions of carbon dioxide resulting from combustion of fuels are required to be reported.
- (i) Notwithstanding any other provisions of 310 CMR 7.71, for emissions that occur during calendar year 2009, only emissions of greenhouse gases from stationary emission sources, and from vehicles that are designed or intended primarily for operation on public roadways, are required to be reported.
- (j) Postponement of the Reporting Deadline for The Climate Registry Reporters.
 1. Notwithstanding the April 15th reporting deadline in 310 CMR 7.71(5)(a), the Department may postpone the reporting deadline for any facility until June 30th of that year if:
 - a. the entity reporting greenhouse gas emissions from said facility pursuant to 310 CMR 7.71 is a member of The Climate Registry by March 15th;
 - b. greenhouse gas emissions from said facility are being included in a voluntary, entity-wide report to The Climate Registry; and,
 - c. the entity notifies the Department of its intent to postpone reporting by March 15th using a form provided by the Department.
 - 2. If notification is provided pursuant to 310 CMR 7.71(7)(j)1., and greenhouse gas emissions from said facility are not included in a voluntary, entity-wide report that is submitted to The Climate Registry by June 30th, or are not reported pursuant to 310 CMR 7.71(5) by June 30th, then any entity owning, operating, or controlling said facility shall be deemed to be out of compliance with the April 15th reporting deadline specified in 310 CMR 7.71(5)(a).
- (k(f) Once a facility files a report pursuant to 310 CMR 7.71(5) on or after January 1, 2011, it is considered to be a registered reporter untilunless the department approves a petition pursuant to 310 CMR 7.71(3)(b)2.
- (6) Requirements for Certification, and Recordkeeping, and Public Release of Facility Reports.
 - (a) Entities subject to the requirement to report greenhouse gas emissions in accordance with 310 CMR 7.71(5) shall certify and verify the truth, accuracy, and completeness of their greenhouse gas emissions reports using a form provided format specified by the Department or the registry. The forminformation shall include, but not be limited to, the following:
 - 1. Any information deemed necessary by the Department to identify the reporting facility.
 - 2. The following certification statement: "I certify that I have personally examined the greenhouse gas emissions report for this facility and am familiar with the information contained in that report and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including possible fines and imprisonment."
 - 3. The authorized signature and contact information of a responsible official of the entity subject to the requirement to report greenhouse gas emissions in accordance with 310 CMR 7.71(5).
 - (b) Copies of documents and other information supplied to the Department, the registry, or an approved verification body to comply with 310 CMR 7.71(5) and (7) shall be retained at the facility for five years from the date of submittal.
 - (c) All supporting documentation and calculations related to quantifying and reporting greenhouse gas emissions from the facility shall be retained at the facility for five years from the date of submittal and made available to the Department upon request.

 (d) Information submitted pursuant to 310 CMR 7.71(5) shall be available to the public
 - electronically through the registry.
- (7) Triennial Verification of Facility Reports.
 - (a) Entities subject to the requirement to report greenhouse gas emissions from a facility in accordance with 310 CMR 7.71(5) shall employ an approved verification body to verify the greenhouse gas emissions report for that facility once every three years in accordance with the following staggered schedule:
 - 1. Entities that reported greenhouse gas emissions in excess of 25,000 short tons of carbon dioxide that occurred during 2009 from a facility shall employ an approved verification body and verify the 2010 greenhouse gas emissions report for that facility

- by December 31, 2011, and for every third year thereafter (e.g., the 2013 report shall be verified by December 31, 2014).
- 2. Entities that were not subject to the verification requirement in 310 CMR 7.71(7)(a)1. for a facility, and that reported greenhouse gas emissions in excess of 10,000 short tons of greenhouse gases in carbon dioxide equivalents that occurred during 2010 for that facility, shall employ an approved verification body and verify the 2011 greenhouse gas emissions report for that facility by December 31, 2012, and for every third year thereafter (e.g., the 2014 report shall be verified by December 31, 2015).
- 3. Entities that were not subject to the verification requirement in 310 CMR 7.71(7)(a)1. or 2. for a facility, and that reported any greenhouse gas emissions that occurred in 2012 for that facility, shall employ an approved verification body and verify the 2012 greenhouse gas emissions report for that facility by December 31, 2013, and for every third year thereafter (e.g., the 2015 report will be verified by December 31, 2016).
- 4. Entities that were not subject to the verification requirement in 310 CMR 7.71(7)(a)1., 2., or 3. for a facility, and that reported any greenhouse gas emissions that occurred in any year after 2012 from that facility, shall employ an approved verification body and verify the greenhouse gas emissions report for that facility by December 31st of the calendar year following the calendar year during which the emissions occurred, and for every third year thereafter.
- 5. In order to establish a common triennial verification schedule for a group of facilities, an entity may choose to employ an approved verification body to verify the greenhouse gas emissions report for any facility in advance of the schedule established for that facility pursuant to 310 CMR 7.71(7)(a). Once a greenhouse gas emissions report for a facility has been verified in advance of the schedule established for that facility pursuant to 310 CMR 7.71(7)(a), any entity that is subject to the requirement to report greenhouse gas emissions from that facility in accordance with 310 CMR 7.71(5) shall employ an approved verification body to verify the greenhouse gas emissions report for that facility for every third year thereafter, and shall not be subject to any other reporting schedule established pursuant to 310 CMR 7.71(7)(a).
- (b) Verification shall be documented using a form provided by the Department. The verification form shall include, but not be limited to, the following:
 - 1. Any information deemed necessary by the Department to identify the reporting facility and the approved verification body.
 - 2. Any information deemed necessary by the Department to ensure that the approved verification body is aware of all relevant provisions of 310 CMR 7.71.
 - 3. The following certification statement: "I certify that I have personally examined the greenhouse gas emissions report for this facility and am familiar with the information contained in that report and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including possible fines and imprisonment."
- 4. The authorized signature and contact information of the approved verification body. (c) Approved verification bodies may exempt from the verification process emissions from a facility included in a report submitted pursuant to 310 CMR 7.71(5) if said emissions are:
 - 1. carbon dioxide emissions that resulted from combusting either fossil fuels or biogenic fuels, and that were quantified and reported in accordance with 40 CFR Part 75. In the event that emissions quantified and reported in accordance with 40 CFR Part 75 include emissions resulting from the combustion of both biogenic and fossil fuels, said emissions shall be exempt from the verification process only if the biogenic and fossil portions of said emissions are separately quantified in accordance with 40 CFR Part 75:
 - 2. greenhouse gas emissions that have been quantified, reported, and verified in accordance with the offset provisions in 310 CMR 7.70(10), or corresponding provisions in the CO2 Budget Trading Program regulations of any other state; or,
 - 3. greenhouse gas emissions that have been voluntarily reported to The Climate Registry, verified in accordance with the *General Verification Protocol*, and made publically available by The Climate Registry.
- (d) The Department may require the entity that reported greenhouse gas emissions from a facility, or the approved verification body that verified an emissions report, to explicitly identify any emissions that have been exempted from the verification process pursuant to

310 CMR 7.71(7)(c).

- (e) Verification shall be in accordance with all applicable requirements of the *General Verification Protocol*. Notwithstanding any references to a reporting "entity" in the *General Reporting Protocol* or the *General Verification Protocol*, a facility subject to the requirement to report greenhouse gas emissions in accordance with 310 CMR 7.71(5) shall be considered to constitute a complete reporting entity for the purpose of reporting greenhouse gas emissions in accordance with 310 CMR 7.71(5).
- (f) Verification by an approved verification body shall be at the expense of the entity reporting greenhouse gas emissions in accordance with 310 CMR 7.71(5).
- (g) In the event that errors in a certified greenhouse gas report are discovered during the verification process, the reporting entity shall correct said errors and any corresponding errors in the previous two annual reports, and shall re-certify said reports.
- (h) Not later than December 31, 2014, the Department shall complete a review, including an opportunity for public comment, of the verification requirement established pursuant to 310 CMR 7.71(7). This review shall evaluate the costs of verification to facilities, the quality and uses of the data in the registry, and any other information relevant to determining whether the verification requirement should be amended.

(8) Voluntary Reporting by Facilities.

- (a) Any entity owning, controlling or operating a facility that is not subject to 310 CMR 7.71(5)(a) may voluntarily report direct emissions or direct stackgreenhouse gas emissions from that facility in accordance with 310 CMR 7.71(5)(b) through (j), provided that the facility is located in Massachusetts and that the entity complies with all requirements of 310 CMR 7.71(5) through (8), including the requirement to employ an approved verification body are met.).
 - (b) Voluntary Inclusion of Additional Data Elements in Reports. Any entity which submits a greenhouse gas emissions report for a facility in accordance with 310 CMR 7.71(5) or (8)(a) may voluntarily include any additional greenhouse gas emissions data that can be accommodated by the registry in the report, provided that such emissions are calculated in accordance with all applicable requirements of 310 CMR 7.71 (5) through (7), and provided that such emissions are reported electronically in a format that can be accommodated by the registry. Additional voluntary greenhouse gas emissions data may include, but is not limited to, indirect emissions due to electricity consumption at any facility, motor vehicle emissions from a facility that emitted less than 5,000 short tons of greenhouse gas emissions in a particular year, and emissions of gases other than carbon dioxide that occurred in 2009.

(9) Reporting Requirements for Retail Sellers of Electricity.

(a) Each retail seller of electricity shall annually report to the Department its megawatt hours sold and associated greenhouse gas emissions. The first required reporting year for retail sellers which are competitive suppliers is the first year after 2007 in which they sell electricity in Massachusetts. Biogenic and non-biogenic greenhouse gas emissions shall be reported separately. This report shall be on a form provided by the Department and shall include a spreadsheet showing the calculations required under 310 CMR 7.71(9)(c).

(b) Deadlines.

- 1. An initial report shall be submitted within 30 days after the Department posts on its website in 2010 the final annual emission factors listed in 310 CMR 7.71(9)(c) for 2005, 2006, or 2007, as determined by the Department. Any retail seller choosing to report under the options of 310 CMR 7.71(9)(d)3. through 7. shall report the information required by 310 CMR 7.71(9)(d)3. through 7. within 30 days after the Department posts the draft annual emission factors on its website in 2010.
- 2. Beginning with 2010 calendar year emissions, the annual report shall be submitted by the first day of the next month that is a full calendar month after the Department posts on its website the final annual emission factors listed in 310 CMR 7.71(9)(c). The 2017 calendar year emissions shall be the last annual report submitted under 310 CMR 7.71. The 2017 calendar year megawatt hour data, submitted by July 1, 2018, under the optional reporting in 310 CMR 7.71(9)(d)3. through 6., shall be the last optional reporting of megawatt hour data under 310 CMR 7.71.
- 3. In order to finalize the annual biogenic and non-biogenic emission factors, the Department shall:
- a. post draft annual emission factors, including methodologies and data sources,

on its website for public comment for 30 days and notify retail sellers of the posting and of the deadline for submittal of public comment; and

b. post final annual emission factors, including methodologies and data sources, on its website and notify retail sellers of the posting.

(c) All retail sellers shall use the following formula to calculate greenhouse gasemissions:

GHG = EF * MWh / 2000 pounds per short ton

GHG = Short tons of greenhouse gases (in carbon dioxide equivalents) associated with electricity sold in MA in a particular calendar year.

EF = Emission factors supplied by the Department each year for biogenic and non-biogenic greenhouse gas emissions (pounds carbon dioxide equivalents per megawatt hour).

MWh = Annual electricity consumed by customers in a particular calendar year, increased to account for the portion of electricity lost during transmission and distribution (line losses), as specified in 310 CMR 7.71(9)(d)1. and 2. (megawatthours).

(d) Source of Megawatt Hour Data.

1. Retail sellers subject to the Renewable Portfolio Standard (RPS) regulations at 225 CMR 14.00: Renewable Energy Portfolio Standard - Class I or 15.00: Renewable Energy Portfolio Standard Class II shall report, and use in calculating biogenic and non biogenic greenhouse gas emissions, the same number of megawatt hours used to calculate any RPS obligation under 225 CMR 14.00 or 15.00, inclusive of line losses. 2. Municipal electric department and municipal light board retail sellers not subject to 225 CMR 14.00: Renewable Energy Portfolio Standard - Class I or 15.00: Renewable Energy Portfolio Standard Class II shall report, and use in calculating biogenic and non-biogenic greenhouse gas emissions, the same number of megawatt hours reported in the annual return to the Department of Public Utilities, inclusive of line losses. 3. Optional RPS Retail Seller Reporting of Non-emitting RPS-Eligible Electricity. Retail sellers subject to 225 CMR 14.00: Renewable Energy Portfolio Standard - Class I or 15.00: Renewable Energy Portfolio Standard Class II may choose to subtract any megawatt hours of electricity generated by non-emitting electricity generators from the amount of megawatt hours reported in 310 CMR 7.71(9)(d)1. to report calculations of biogenic and non-biogenic greenhouse gas emissions, in addition to those required in 310 CMR 7.71(9)(d)1., if such non-emitting megawatt hours are reported in the annual report due under 310 CMR 7.71(9)(a) and provided the following criteria are met: a. if used to demonstrate compliance by that retail seller with any RPS obligation under 225 CMR 14.00: Renewable Energy Portfolio Standard - Class I or 15.00: Renewable Energy Portfolio Standard Class II, such megawatt hours match those reported to the Department of Energy Resources for compliance with 225 CMR-14.00 or 15.00; or

b. if not used to demonstrate compliance with any RPS obligation under 225 CMR 14.00: Renewable Energy Portfolio Standard—Class I or 15.00: Renewable Energy Portfolio Standard—Class II:

i. were otherwise eligible to be used to demonstrate compliance with any RPS obligation under 225 CMR 14.00: Renewable Energy Portfolio Standard - Class I or 15.00: Renewable Energy Portfolio Standard - Class II; and ii. whose associated renewable energy certificates in the New England Power Pool Generation Information System are retired from that retail seller's Massachusetts Retail Subaccount, as defined in the New England Power Pool Generation Information System Operating Rules; and

iii. such megawatt hours match those in that retail seller's New England Power Pool Generation Information System report, which shall be submitted to the Department no later than the first day of July after the calendar year in which the megawatt hours were generated.

4. Optional RPS Retail Seller Reporting of Non-emitting Non-RPS eligible Electricity. Retail sellers subject to 225 CMR 14.00: Renewable Energy Portfolio Standard—Class I or 15.00: Renewable Energy Portfolio Standard—Class II may choose to subtract any megawatt hours of electricity generated by non-emitting electricity generators from the amount of megawatt hours reported in 310 CMR 7.71(9)(d)1. to report calculations of biogenic and non-biogenic greenhouse gas emissions, in addition to those required in 310 CMR 7.71(9)(d)1., if such non-emitting megawatt hours are reported in the annual report due under 310 CMR 7.71(9)(a) and provided the following criteria are met:

a. such non-emitting megawatt hours were not eligible to be used to demonstrate compliance with any RPS obligation under 225 CMR 14.00: Renewable Energy Portfolio Standard - Class I or 15.00: Renewable Energy Portfolio Standard - Class II:

b. the associated certificates in the New England Power Pool Generation Information System are retired from that retail seller's Massachusetts Retail Subaccount, as defined in the New England Power Pool Generation Information System Operating Rules;

e. such non-emitting megawatt hours match those in that retail seller's New England Power Pool Generation Information System report, which shall be submitted to the Department no later than the first day of July after the calendar year in which the megawatt hours were generated; and

- d. the retail seller provides a copy of the contract or contracts establishing that the retail seller has purchased electricity from such non-emitting electricity generators, in addition to the certificates retired under 310 CMR 7.71(9)(d)4.b., which shall be submitted to the Department no later than the first day of July after the calendar year in which the megawatt hours were generated.
- 5. Optional Non-RPS Retail Seller Reporting of Non-emitting Electricity. Retail sellers not subject to 225 CMR 14.00: Renewable Energy Portfolio Standard Class I or 15.00: Renewable Energy Portfolio Standard Class II may choose to subtract any megawatt hours of electricity generated by non-emitting electricity generators from the amount of megawatt hours reported in 310 CMR 7.71(9)(d)2. to report calculations of biogenic and non-biogenic greenhouse gas emissions, in addition to those required in 310 CMR 7.71(9)(d)2., if such non-emitting megawatt hours are reported in the annual report due under 310 CMR 7.71(9)(a), and provided the following criteria are met: a. such non-emitting megawatt hours are no greater than those reported in the annual return submitted to the Department of Public Utilities;

b. the retail seller provides information from the New England Power Pool Generation Information System showing that the certificates associated with the non-emitting megawatt hours of electricity were Unsettled Certificates whose attributes were aggregated in Residual Mix Certificates, both as defined in the New England Power Pool Generation Information System Operating Rules, which shall be submitted to the Department no later than the first day of July after the calendar year in which the megawatt hours were generated; and

e. for non-emitting electricity generators not owned by the retail seller, the retail seller provides a copy of the contract or contracts establishing that the retail seller has purchased electricity from such non-emitting electricity generators and reports such megawatt hours, which shall be submitted to the Department no later than the first day of July after the calendar year in which the megawatt hours were generated. 6. Optional Retail Seller Reporting of Emitting Electricity. Retail sellers may choose to report calculations of biogenic and non-biogenic greenhouse gas emissions, in addition to those required in 310 CMR 7.71(9)(d)1. and 2., based on 310 CMR 7.71(9)(d)6.d. and the amount of any megawatt hours of electricity generated by emitting electricity generators subtracted from the amount of megawatt hours reported in 310 CMR 7.71(9)(d)1. or 2., if such emitting megawatt hours are reported in the annual report due under 310 CMR 7.71(9)(a), and provided the following criteria are met:

a. such megawatt hours are reported to the Department no later than the first day of July after the calendar year in which the megawatt hours were generated; and b. for retail sellers subject to 225 CMR 14.00: Renewable Energy Portfolio Standard—Class II.

i. If used to demonstrate compliance by that retail seller with any RPS obligation under 225 CMR 14.00: Renewable Energy Portfolio Standard—Class II or 15.00: Renewable Energy Portfolio Standard—Class II, such megawatt hours match those reported to the Department of Energy Resources for compliance with 225 CMR 14.00 or 15.00.

- ii. If not used to demonstrate compliance with any RPS obligation under 225 CMR 14.00: Renewable Energy Portfolio Standard Class I or 15.00: Renewable Energy Portfolio Standard Class II:
- (i) the associated certificates in the New England Power Pool Generation Information System are retired from that retail seller's Massachusetts Retail Subaccount, as defined in the New England Power Pool Generation Information System Operating Rules; (ii) such emitting megawatt hours match those in that retail seller's New England Power

Pool Generation Information System report, which shall be submitted to the Department no later than the first day of July after the calendar year in which the megawatt hours were generated; and

(iii) for emitting megawatt hours that were not eligible to be used to demonstrate compliance with any RPS obligation under 225 CMR 14.00: Renewable Energy Portfolio Standard—Class I or 15.00: Renewable Energy Portfolio Standard—Class II, and that were generated by electricity generators not owned by the retail seller, the retail seller provides a copy of the contract or contracts establishing that the retail seller has purchased electricity from such emitting electricity generator, in addition to the certificates retired under 310 CMR 7.71(9)(d)6.b.ii(i), which shall be submitted to the Department no later than the first day of July after the calendar year in which the megawatt hours were generated.

e. for retail sellers not subject to 225 CMR 14.00: *Renewable Energy Portfolio Standard - Class I* or 15.00: *Renewable Energy Portfolio Standard - Class II*:

i. such emitting megawatt hours are no greater than those reported in the annual return submitted to the Department of Public Utilities;

ii. the retail seller provides information from the New England Power Pool Generation Information System showing that the certificates associated with the emitting megawatthours of electricity were Unsettled Certificates whose attributes were aggregated in Residual Mix Certificates, both as defined in the New England Power Pool Generation Information System Operating Rules, which shall be submitted to the Department nolater than the first day of July after the calendar year in which the megawatt hours were generated; and

iii. for emitting electricity generators not owned by the retail seller, the retail seller provides a copy of the contract or contracts establishing that the retail seller has purchased electricity from such emitting electricity generators, which shall be submitted to the Department no later than the first day of July after the calendar year in which the megawatt hours were generated.

d. For all retail sellers:

i. if all megawatt hours generated by a particular stationary emission source that reports under 310 CMR 7.71(5) or (8) are subtracted by a retail seller under 310 CMR 7.71(9)(d)6. and all carbon dioxide, methane and nitrous oxide emissions associated with generation of such megawatt hours of electricity subtracted under 310 CMR 7.71(9)(d)6. match the emissions reported under 310 CMR 7.71(5) or (8), then the retail seller shall so state in the report submitted under 310 CMR 7.71(9)(d)6.a. ii. if only a portion of the emissions reported by a particular stationary emission source under 310 CMR 7.71(5) or (8) are associated with the megawatt hours of electricity subtracted under 310 CMR 7.71(9)(d)6., then the retail seller shall document an apportionment of the emissions, and shall submit such documentation to the Department no later than the first day of July after the calendar year in which the megawatt hours were generated.

- iii. if the carbon dioxide, methane and nitrous oxide emissions associated with generation of the megawatt hours of electricity by a particular stationary emission source subtracted under 310 CMR 7.71(9)(d)6. are not reported under 310 CMR 7.71(5) or (8), such emissions, and documentation of any apportionment of carbon dioxide, methane and nitrous oxide emissions, shall be submitted to the Department no later than the first day of July after the calendar year in which the megawatt hours were generated. Total carbon dioxide, methane and nitrous oxide emissions of the particular stationary emission source shall be verified by an approved verification body by the last day of the year after the calendar year in which the megawatt hours were generated, beginning with the later of 2010 emissions or the emissions associated with the first year a particular stationary emission source's megawatt hours are subtracted under 310 CMR 7.71(9)(d)6., and for every third year thereafter that a particular stationary emission source's megawatt hours are subtracted under 310 CMR 7.71(9)(d)6.
- 7. Retail Seller Reporting of Total Electricity Adjustments. Retail sellers shall report calculations of biogenic and non-biogenic greenhouse gas emissions, in addition to those required in 310 CMR 7.71(9)(d)1. and 2., totaling any reporting chosen under 310 CMR 7.71(9)(d)1. through 6.
- (e) Retail sellers subject to the requirement to report greenhouse gas emissions in accordance with 310 CMR 7.71(9) shall certify greenhouse gas emissions reports using a form provided by the Department. The form shall include, but not be limited to, the following:
- 1. Any information deemed necessary by the Department to positively identify the retail

seller.

- 2. The following certification statement: "I certify that I have personally examined the greenhouse gas emissions report I am submitting and am familiar with the information contained in that report and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including possible fines and imprisonment."
- 3. The authorized signature and contact information of a responsible official of the entity subject to the requirement to report greenhouse gas emissions in accordance with 310 CMR 7.71(9).
- (f) Copies of documents and other information supplied to the Department, the registry, or an approved verification body to comply with 310 CMR 7.71(9) shall be retained by the retail seller for five years from the date of submittal.
- (g) All supporting documentation and calculations related to quantifying and reporting greenhouse gas emissions from the retail seller shall be retained by the retail seller for five years from the date of submittal and made available to the Department upon request.
- (h) Once a retail seller files a report pursuant to 310 CMR 7.71(9) on or after January 1, 2011, it is considered to be a registered reporter until the retail seller notifies the department that it is no longer subject to the reporting requirements.

310 CMR 7.75: Clean Energy Standard

310 CMR 7.75(9)(c)2.

Beginning with 2018 calendar year generation, MEDs and MLBs choosing to report under 310 CMR 7.75(9)(c)5.b. and c. shall submit those reports on a form provided by the Department no later than the first-fifteenth day of July-November after the calendar year in which the MWh were generated.

310 CMR 7.75(9)(c)5.

- 5. Source of Megawatt Hour and Emissions Data for Retail Sellers That Are MEDs or MLBs.
 - a. In calculating biogenic and non-biogenic greenhouse gas emissions, MEDs and MLBs shall use the same number of MWh reported in the annual return to the Department of Public Utilities, inclusive of line losses.
 - b. Optional MED and MLB Reporting of Non-emitting Electricity. MEDs and MLBs may choose to subtract any MWh of electricity generated by non-emitting electricity generators from the amount of MWh reported in 310 CMR 7.75(9)(c)5.a., if such non-emitting MWh are reported in the annual report due under 310 CMR 7.75(9)(c)1., and provided the following criteria are met:
 - i. for MWh neither owned nor contracted for, a report is provided from NEPOOL GIS showing that such non-emitting 225 CMR 14.00- or 225 CMR 15.00-eligible certificates are retired in the MED's or MLB's NEPOOL GIS Massachusetts Retail Subaccount or are transferred to the Reserved Certificate account, as defined in the NEPOOL GIS Operating Rules, or
 - ii. for MWh owned or contracted for, the MED or MLB:
 - A. the MED or MLB-reports MWh by fuel and by state or province; ii.-B. the MED or MLB-provides information from the NEPOOL GIS showing that the certificates associated with the non-emitting MWh of electricity were unsettled certificates whose attributes were aggregated in residual mix certificates, or are retired in the MED's or MLB's NEPOOL GIS Massachusetts Retail Subaccount or are transferred to the Reserved Certificate account, both as defined in the NEPOOL GIS Operating Rules; and
 - iii. C. for contracted non-emitting electricity generators not owned by the MED or MLB, the MED or MLB provides a copy of the contract or contracts establishing that it has purchased electricity from such non-emitting electricity generators and reports such MwWh.
 - c. Optional MED and MLB Reporting of Emitting Electricity. MEDs and MLBs may choose to report calculations of biogenic and non-biogenic greenhouse gas emissions, based on the methodology provided in 310 CMR 7.75(9)(c)6., if such emitting MWh are reported in the annual report due under 310 CMR 7.75(9)(c)1., and provided the following criteria are met:

6/25/21

i. for MWh neither owned nor contracted for, a report is provided from NEPOOL GIS showing that such emitting 225 CMR 14.00- or 225 CMR 15.00-eligible certificates are retired in the MED's or MLB's NEPOOL GIS Massachusetts Retail Subaccount, as defined in the NEPOOL GIS Operating Rules, or

ii. for MWh owned or contracted for, the MED or MLB:

A. the MED of MLB reports MWh by fuel and by state or province;
B. the MED or MLB provides information from the NEPOOL GIS showing that the certificates associated with the emitting MWh of electricity were unsettled certificates whose attributes were aggregated in residual mix certificates, or are retired or reserved in the MED's or MLB's NEPOOL GIS Massachusetts Retail Subaccount or are transferred to the Reserved Certificate account, both as defined

in the NEPOOL GIS Operating Rules; and

C. iii. for contracted emitting electricity generators not owned by the MED or MLB, the MED or MLB provides a copy of the contract or contracts establishing that the MED or MLB has purchased electricity from such emitting electricity generators.

310 CMR 7.75(9)(d)

The Department may specify the format and process by which any submission required pursuant to 310 CMR 7.75 shall occur, including electronic submission requirements. The Department may specify that certain submissions required pursuant to 310 CMR 7.75 be transmitted electronically to DOER, as the Department's agent instead of, or in addition to, the Department.